24/49

Electronic Engineering

GENERAL INDEX

Volume XX

January to December 1948

PAGE

Abstracts of Electronic Literature 36, 68, 136, 204, 240, 272, 340, 376, 412
A.C. Amplifiers, Application to Optical Measurements. 396
A.C.-operated Triodes 178
Aerial Matching Unit for H.F. Reception 30
Aerial, Two Transmitters on one 157
A.G.C. for Vision Receivers 364
Aircraft, Radiocommunication for 233
Alphabet Generator, An Electronic 139
Amplifiers, Magnetic 38, 84
Correspondence 168
Amplifying Crystal Units (Abstract) 354
Apertures in Metal Plates, Making Small ... 186, 369
Apparatus for Investigating Inter-lens Shutters ... 9
Application of A.C. Amplifiers to Optical Measurements 396
Art of Exposition, The 343
Atomic Energy Research Establishment, The... 267, 289
Automatic Gain Control for Vision Receivers ... 364
Automatic Polar Diagram Recorder 17

Bass Correction Circuit for M.C. Pickups, A 187
Betation Toroid, A 15-inch Glass 249
Bridge Measurement, A New Technique 28

BOOK REVIEWS—

A.B.C. of Electronics 35
Broadcast Operator's Handbook 303
Catalogue of Scientific Apparatus 35
Cathode Ray Oscillographs 338
Crystal Rectifiers 271
Directional Antennas 203
Electrical Contacts 410
Electrical Engineering 134
Electrical Materials 239
Electron and Nuclear Counters 374
Electron and Nuclear Physics 373
Electronics 408
Electrons in Gases 170
Electronic Circuits and Tubes 238
Electro-Technology 135
Elements of Radio Servicing 239
Five-figure Tables 373
F.M. Transmission and Reception 302
Fundamentals of Elec. Engineering 409
General Electrical Engineering 409
H.F. Measuring Techniques 135
Ionospheric Propagation 373
Klystron Tubes 66
Luminous Tube Lighting 67
Manual of Vacuum Practice 372
Microwave Mixers 271
Microwave Technique 135
Microwaves and Wave Guides 66
One Story of Radar... 338
Physics for Students 337
Principles of Wave Guides 102
Principles of Radar 336
Radar Aids to Navigation 202
Radio Aids to Navigation 102
Radio Amateurs' Handbook 171
Radio Data Charts 203
Radio Engineering 34
Radio Laboratory Handbook 303
Radio Technique 132
Science at War 238
Second Year Radio 34
Sound Recording 270
Technique of Microwave Measurements 302
Television 337
Television Explained 103
Television Simply Explained 338
Television Receiver Construction 171
Understanding Vectors 239
Valve Technique 270
Very High Frequency Techniques 170
Vibration and Sound 372
Wireless Direction Finding 67
Working for the Films 103

Cabinets for Projection Television Receivers 263

CATHODE FOLLOWER, THE—

Parts 1 and 2, Linear Theory 12, 55
Part 3, General Theory 92
Part 4, Appendices 126
Cathode Ray Engine Analyser, A New 130

CATHODE RAY TUBES—

A C.R. Tube Chronoscope 384
A C.R. Tube Engine Analyser 130
E.H.T. Supplies for 25

PAGE

Preventing Damage to 161
Visible Vectors on 402
Recording Traces, A New Development in ... 58
Cathode Ray Tube Chronoscope, A 384
Chromoscope, The—A New Colour Television Tube ... 190
Chronoscope, A C.R. Tube 384
Circuit Breaker for Instrument Protection, A Sensitive 26
Circuit and Current Noise 145
Circuit Diagram, Improving 175
Commercial Disk Recording (Abstract) 61
Component Making, Twenty-five Years of 118
Components for Broadcast Receivers, Selecting ... 307
Computing Circuits, Potentiometers for 358
Connsonata, The—A New Musical Instrument ... 348
Control Console, A Modern Broadcasting Studio ... 343

CORRESPONDENCE—

Circuit Diagrams 304
Degrees for Ex-Service Men 62
Demagnetising Valves 339,406
Magnetic Amplifiers 168
Miller Integrator 369
Modulating Light Beams 369
New Units 62, 99
Review of "Television" 369
Small Apertures in Plates 304
Stabilised Power Supplies 169
Synchrodyne 132, 266
Television Bandwidths 62
Voltage Stabilisers 262
C.P.S. Emitron, The 59
Cracks, Detection of by X-Rays and γ-Rays 106

Demagnetising Valves as a Cure for Residual Ripple... 235
Correspondence 339, 406
Design for a Brain 379
Detection of Cracks by X-Rays and γ-Rays ... 106
Diamonds as Radiation Detectors 83
Diodes, Power 164, 254, 285
Direct Reading Indicator for Electronic Counters ... 112
Distortion Correction in Television Waveforms ... 252
Distortion, Telegraph, Measurement of 181
Dry Voltaic Pile 317

Editorial 1, 37, 69, 105, 137, 173, 205, 241, 273, 305, 341, 377
EDSAC, An Ultrasonic Memory Unit for 208
Electrets 180
Electro-acoustic Transducer, A New 74
Electron Multiplier, The Mazda 88
Electronic Alphabet Generator, An 139
Electronic Counters, Direct Reading Indicator for ... 112

ELECTRONIC EQUIPMENT—

Reviews of Products 198, 236, 268, 298, 331, 370, 404
Electronic Indicator for H.V. Testing, An 390
Electronic Maximum Demand Tell-Tale, An 89
Electronic Nose, An (Photograph) 367
Electronic Shutter Tester, An 251
Electronics in Atomic Energy Programmes 148
Electronics in the Farmyard 24
Engine Analyser, A New Cathode Ray 130

EXHIBITIONS—

The Manchester Electronics 296
Physical Society 152
R.C.M.F 114

Fifteen-inch Glass Betatron Toroid, A 249
Future Possibilities of Navigational Radar 31

Geiger-Müller Tubes, Modern 70
German Radio Capacitors 355
Germanium Rectifiers 232
Glass-based Valves, Mechanical Problems in 393

H.F. Pentodes in Electrometer Circuits 227
High-Frequency Baking 162
High-Sensitivity Photo-cell Circuit 401
High-Speed Paper Counter, A 367
High-Vacuum Pumps 3, 44, 79, 122
High-Voltage Testing—An Electronic Instrument for.. 390

PAGE

Ignition of Ignitrons, The 350
Ignition Interference Suppression on the "Televisor".. 253
Improved Pulse Frequency Divider 196
Improving Circuit Diagrams 175
Improving Fly-back Tune on a Miller Time Base ... 97
Industrial Television 294
Information (Editorial) 1
Infra-Red Image Converter, The 274, 314
Instrument Protection, A Sensitive Circuit Breaker for 26
Interference with Television Reception (Note) ... 95
Interference Eliminator for Television Receivers ... 392
Inter-Lens Shutters, Apparatus for Investigating ... 9
International Television Convention at Zurich ... 362
Investigation of Inter-Lens Shutters, Apparatus for ... 9

Linear Accelerator, The 346
Luminescence of Simple Oxide Phosphors 219

Magic Eye Tubes as Polarity Indicators 125
Magnetic Amplifiers 38, 84
Correspondence 168
Magnetic Fluid Clutch, A (Abstract) 265
Magnetic Materials 351
Making Small Apertures in Metal Plates 186
Correspondence 369
Manchester Electronics Exhibition, The 296
Matching Unit for H.F. Reception, An Aerial... ... 30
Maximum Demand Tell-Tale, An Electronic 89
Measurement of Telegraph Distortion 181
Measuring Cloud Heights (Abstract) 189
Mechanical Problems in the Use of Glass-based Valves 393
Metal-Ceramic Seals, Titanium Technique for... ... 100
Miller Integrator, The 243, 279, 325
Modern Broadcasting Studio Control Console ... 334
Modern Geiger-Müller Tubes 70
Modulation Meter, A Simple 399
Multilingual Interpreting Systems (Abstract) ... 60

Navigational Radar, Future Possibilities of 31
New Cathode Ray Engine Analyser 130
New Developments in Recording Oscillograph Traces.. 58
New Electro-Acoustic Transducer, A 74
New Rectifier, E.H.T. Unit 144
New Technique in Bridge Measurements 28
New Television Camera, A—The C.P.S. Emitron ... 59
Nine Kc/s. Whistle Filter, A 320
Noise, Circuit and Current 145
Noiseless Sound Recording Equipment 48

NOTES FROM THE INDUSTRY— 32, 65, 101, 162, 201, 234, 300, 366

Optimum Frequency Range 98
Oscillator for Quartz Crystals, A Test 332

Paris Television Convention, 1948 395
Permeability Tuning Coils 78
Phosphors, Luminiscence of Simple Oxide 219
Photo-cell Circuit, A High-Sensitivity 401
Physical Society's Exhibition, The 152
Pick-ups, Bass Correction for Moving Coil 187
Pile, The Dry Voltaic 317
Polar Diagram Recorder, An Automatic 17
Power Diodes
1. Design 164
2. Manufacture 254
3. Rating 285
Power Valve Protection Circuit (Note)... 353
Preventing Damage to C.R. Tubes 161
Printed Circuits (Photos) 113
Printing Scales and Labels 259
Pulse Frequency Divider, An Improved 196
Pye Transformerless Television Receiver, The ... 306

Quartz Crystals, A Test Oscillator for 333

Radio Frequency, E.H.T. Supplies 264
Radio Frequency, Mass Spectrometer (Abstract) ... 368
Radiocommunication for Aircraft 233
Radio Valve Practice (BRVMA Recommendations) ... 321
RCMF Exhibition, The 114
Rectifier Unit, A New E.H.T. 144
Rectifiers, Germanium 232
Royal Society's Conference on Scientific Information.. 248

Schlieren Effect in Electron Optics, The (Note) ... 330
Scientific Information, R.S. Conference on 248
Selecting Components for Broadcast Receivers ... 307
Sensitive Circuit Breaker for Instrument Protection ... 26
Shutter Tester, An Electronic 251
Simple Modulation Meter, A 399
Simplified Connexions 292
Single Sweep Time Base, A 160
Skiatron, The (Dark Trace Tube) 20
Small Apertures in Metal Plates, Making ... 186, 369
Sound Recording Equipment, Noiseless 48
Stabilising Power Supplies, A Note on 96
Standard Frequency Transmission 313
Sync. Separator and Double Tune Base for Television. 361

SYNCHRODYNE, THE—
Control of Phase Angle 49
Correspondence 63, 132
Reception of Weak Stations adjacent to Strong... 51
Senior Model Circuit Diagram 54

Telecommunication System, A 2-Phase ... 150, 192
Telegraph Distortion, Measurement of 181

TELEVISION—
A.G.C. for Vision Receivers 364
At Copenhagen (Pictures) 342
Cabinets for Projection Receivers 263
Distortion Correction in Waveforms 252
Efficient Scanning Circuit (R.C.A.) 31
Industrial 294
Interference Eliminator for Receivers 392
International Convention 362
London-Birmingham Relay (Picture) 197
New Television Camera—The C.P.S. Emitron ... 59
New Television Film Scanner (Picture) 174
Paris Convention 395
Pye Transformerless Receiver 306
Sutton Coldfield Station I.F. Chart 345
Sync. Separator and Double Tune Base 361

"TELEVISOR," THE—
Announcements 366, 407
Ignition Interference Suppression 253
Notes and Queries 25
Pre-amplifier 226
Test Oscillator for Quartz Crystals 333
Three-dimensional Cathode Ray Tube Displays (Pictures) 138
Time Base, A Single Sweep 160
Titanium Technique for Metal-Ceramic Seals 100
Tolerance Testing Techniques 260
Tone Control Circuit, A Simple 91
Transmitters, Two on One Aerial 157
Transistor, The 284
T.R.E.—The Telecommunications Research Establishment 206
Triodes, A.C.-operated 178
Twenty-five Years of Component Making 118
Two-Phase Telecommunications System, A ... 150, 192
Two Transmitters on One Aerial 157

Ultrasonic Memory Unit for the EDSAC 208

Valves, Demagnetising, as a Cure for Residual Ripple 235
Vibrator Beam Switching 23
Visible Vectors 402

Whistle Filter, A Nine Kc/s. 320

Zamboni (Dry Voltaic) Pile, The 317